



STIC Search Report

EIC 1700

STIC Database Tracking Number: 170207

TO: Michael Alexander
Location: REM 6C19
Art Unit : 1742
November 4, 2005

Case Serial Number: 10/662197

From: Les Henderson
Location: EIC 1700
REM 4B28 / 4A30
Phone: 571-272-2538

Leslie.henderson@uspto.gov

Search Notes

Only the inventor was found in the search for the alloy you requested and for Claim 1.

On widening the parameters, only three other abstracts were found when searching only a gold, zinc and nickel alloy.

=> d his

(FILE 'HOME' ENTERED AT 09:10:59 ON 04 NOV 2005)

FILE 'HCAPLUS' ENTERED AT 09:11:09 ON 04 NOV 2005

E US20050100471/PN

L1 1 S US20050100471/PN
SEL RN

FILE 'REGISTRY' ENTERED AT 09:12:54 ON 04 NOV 2005

L2 6 S E1-E6
L3 939 S 90.9-93 AU/MAC
L4 16093 S 6-7.5 NI/MAC
L5 12350 S 0.4-1.5 ZN/MAC
L6 55713 S 0.4-1.5 CU/MAC
L7 11825 S .5>=CO/MAC
L8 56 S L3 AND L4
L9 4 S L8 AND L5
L10 3 S L9 AND L6
L11 3 S L10 AND L7
L12 3 S L11 AND L2
L13 480 S 91.67 AU/MAC
L14 2585 S 0.66 ZN/MAC
L15 7985 S 7 NI/MAC
L16 12855 S 0.6 CU/MAC
L17 3841 S 0.07 CO/MAC
L18 2 S L14 AND L15 AND L16 AND L17 AND L13
L19 3 S L12 OR L18

FILE 'HCAPLUS' ENTERED AT 09:55:23 ON 04 NOV 2005

L20 1 S L19
L21 1 S L18
L22 1 S L20 OR L21

FILE 'REGISTRY' ENTERED AT 09:56:59 ON 04 NOV 2005

L23 1664 S 89-95 AU/MAC
L24 20838 S 0.1-2 ZN/MAC
L25 103387 S 0.1-2 CU/MAC
L26 13638 S 0.8>=CO/MAC
L27 43959 S 4-9 NI/MAC
L28 3 S L23 AND L24 AND L25 AND L26 AND L27
L29 3 S L19 AND L28
L30 3 S L23 AND L24 AND L25 AND L27
L31 6 S L23 AND L24 AND L27
L32 3 S L31 NOT L19

FILE 'HCAPLUS' ENTERED AT 10:21:15 ON 04 NOV 2005

L33 3 S L32

=> => d que stat l22

L2 6 SEA FILE=REGISTRY ABB=ON PLU=ON (851462-50-5/BI OR
851462-53-8/BI OR 851462-56-1/BI OR 851462-59-4/BI OR
851462-62-9/BI OR 851462-65-2/BI)

L3 939 SEA FILE=REGISTRY ABB=ON PLU=ON 90.9-93 AU/MAC

L4 16093 SEA FILE=REGISTRY ABB=ON PLU=ON 6-7.5 NI/MAC

L5 12350 SEA FILE=REGISTRY ABB=ON PLU=ON 0.4-1.5 ZN/MAC

L6 55713 SEA FILE=REGISTRY ABB=ON PLU=ON 0.4-1.5 CU/MAC

L7 11825 SEA FILE=REGISTRY ABB=ON PLU=ON .5>=CO/MAC

L8 56 SEA FILE=REGISTRY ABB=ON PLU=ON L3 AND L4

L9 4 SEA FILE=REGISTRY ABB=ON PLU=ON L8 AND L5

L10 3 SEA FILE=REGISTRY ABB=ON PLU=ON L9 AND L6

L11 3 SEA FILE=REGISTRY ABB=ON PLU=ON L10 AND L7

L12 3 SEA FILE=REGISTRY ABB=ON PLU=ON L11 AND L2

L13 480 SEA FILE=REGISTRY ABB=ON PLU=ON 91.67 AU/MAC

L14 2585 SEA FILE=REGISTRY ABB=ON PLU=ON 0.66 ZN/MAC

L15 7985 SEA FILE=REGISTRY ABB=ON PLU=ON 7 NI/MAC

L16 12855 SEA FILE=REGISTRY ABB=ON PLU=ON 0.6 CU/MAC

L17 3841 SEA FILE=REGISTRY ABB=ON PLU=ON 0.07 CO/MAC

L18 2 SEA FILE=REGISTRY ABB=ON PLU=ON L14 AND L15 AND L16
AND L17 AND L13

L19 3 SEA FILE=REGISTRY ABB=ON PLU=ON L12 OR L18

L20 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L19

L21 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L18

L22 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 OR L21

=> d l22 1 ibib abs hitstr hitind

L22 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:411024 HCAPLUS

DOCUMENT NUMBER: 142:467391

TITLE: White gold alloys of 22-karat type with
formability for jewelry

INVENTOR(S): Taylor, Arthur D.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 4 pp.
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005100471	A1	20050512	US 2003-662197	2003 0912

PRIORITY APPLN. INFO.:	US 2002-410671P	P	2002 0913
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AB The 22-karat Au alloys having good formability and decorative white color contain Ni 6.0-7.5, Zn 0.4-1.5, Cu 0.4-1.5, Co 0.02-0.50, and Au 90.9-93.0% by weight. The Au melt is typically treated for alloying with 8.33% of the master alloy containing Ni 72-90, Zn 4.8-18, Cu 4.8-18, and Co 0.24-6.0%. The typical Au alloy for manufacture of white jewelry (without color control by finish

electroplating with Pd) contains Ni 7.00, Zn 0.66, Cu 0.60, and Co 0.07%. The Au-alloy ingot can be rolled without cracks to 50% of the original thickness, followed by annealing for 15 min at 1425° F to restore workability for another 50% reduction for strip or wire manufacture

IT **851462-50-5 851462-53-8 851462-56-1**

RL: TEM (Technical or engineered material use); USES (Uses) (alloying of; white gold alloys of 22-karat type with formability for jewelry manufacture)

RN 851462-50-5 HCAPLUS

CN Gold alloy, base, Au 91-93, Ni 6-7.5, Cu 0.4-1.5, Zn 0.4-1.5, Co 0-0.5 (9CI) (CA INDEX NAME)

Component	Component Percent	Component Registry Number
Au	91 - 93	7440-57-5
Ni	6 - 7.5	7440-02-0
Cu	0.4 - 1.5	7440-50-8
Zn	0.4 - 1.5	7440-66-6
Co	0 - 0.5	7440-48-4

RN 851462-53-8 HCAPLUS

CN Gold alloy, base, Au 91-93, Ni 6-7.5, Zn 0.5-1, Cu 0.4-0.8, Co 0-0.1 (9CI) (CA INDEX NAME)

Component	Component Percent	Component Registry Number
Au	91 - 93	7440-57-5
Ni	6 - 7.5	7440-02-0
Zn	0.5 - 1	7440-66-6
Cu	0.4 - 0.8	7440-50-8
Co	0 - 0.1	7440-48-4

RN 851462-56-1 HCAPLUS

CN Gold alloy, base, Au 92,Ni 7,Zn 0.7,Cu 0.6,Co 0.1 (9CI) (CA INDEX NAME)

Component	Component Percent	Component Registry Number
Au	92	7440-57-5
Ni	7	7440-02-0
Zn	0.7	7440-66-6
Cu	0.6	7440-50-8
Co	0.1	7440-48-4

IC ICM C22C005-02

ICS C22C019-03

INCL 420457000; 420512000

CC 56-3 (Nonferrous Metals and Alloys)

IT **851462-50-5 851462-53-8 851462-56-1**

RL: TEM (Technical or engineered material use); USES (Uses)
 (alloying of; white gold alloys of 22-karat type with
 formability for jewelry manufacture)

=> => d que stat l33

L2 6 SEA FILE=REGISTRY ABB=ON PLU=ON (851462-50-5/BI OR
 851462-53-8/BI OR 851462-56-1/BI OR 851462-59-4/BI OR
 851462-62-9/BI OR 851462-65-2/BI)

L3 939 SEA FILE=REGISTRY ABB=ON PLU=ON 90.9-93 AU/MAC

L4 16093 SEA FILE=REGISTRY ABB=ON PLU=ON 6-7.5 NI/MAC

L5 12350 SEA FILE=REGISTRY ABB=ON PLU=ON 0.4-1.5 ZN/MAC

L6 55713 SEA FILE=REGISTRY ABB=ON PLU=ON 0.4-1.5 CU/MAC

L7 11825 SEA FILE=REGISTRY ABB=ON PLU=ON .5>=CO/MAC

L8 56 SEA FILE=REGISTRY ABB=ON PLU=ON L3 AND L4

L9 4 SEA FILE=REGISTRY ABB=ON PLU=ON L8 AND L5

L10 3 SEA FILE=REGISTRY ABB=ON PLU=ON L9 AND L6

L11 3 SEA FILE=REGISTRY ABB=ON PLU=ON L10 AND L7

L12 3 SEA FILE=REGISTRY ABB=ON PLU=ON L11 AND L2
 L13 480 SEA FILE=REGISTRY ABB=ON PLU=ON 91.67 AU/MAC
 L14 2585 SEA FILE=REGISTRY ABB=ON PLU=ON 0.66 ZN/MAC
 L15 7985 SEA FILE=REGISTRY ABB=ON PLU=ON 7 NI/MAC
 L16 12855 SEA FILE=REGISTRY ABB=ON PLU=ON 0.6 CU/MAC
 L17 3841 SEA FILE=REGISTRY ABB=ON PLU=ON 0.07 CO/MAC
 L18 2 SEA FILE=REGISTRY ABB=ON PLU=ON L14 AND L15 AND L16
 AND L17 AND L13
 L19 3 SEA FILE=REGISTRY ABB=ON PLU=ON L12 OR L18
 L23 1664 SEA FILE=REGISTRY ABB=ON PLU=ON 89-95 AU/MAC
 L24 20838 SEA FILE=REGISTRY ABB=ON PLU=ON 0.1-2 ZN/MAC
 L27 43959 SEA FILE=REGISTRY ABB=ON PLU=ON 4-9 NI/MAC
 L31 6 SEA FILE=REGISTRY ABB=ON PLU=ON L23 AND L24 AND L27
 L32 3 SEA FILE=REGISTRY ABB=ON PLU=ON L31 NOT L19
 L33 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L32

=> d l33 1-3 ibib abs hitstr hitind

L33 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1976:51511 HCAPLUS
 DOCUMENT NUMBER: 84:51511
 TITLE: Electroplating bright white gold alloy
 coatings
 INVENTOR(S): Greenspan, Lawrence
 PATENT ASSIGNEE(S): Engelhard Minerals and Chemicals Corp., USA
 SOURCE: U.S., 5 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 3915814	A	19751028	US 1973-424473	1973 1213
JP 49065341	A2	19740625	JP 1973-93790	1973 0821
IT 990393	A	19750620	IT 1973-52120	1973 0822

FR 2196908 A1 19740322 FR 1973-30594

1973
0823

AU 7359550 A1 19750227 AU 1973-59550

1973
0823

PRIORITY APPLN. INFO.:

US 1972-283348

A2

1972
0824

AB A new aqueous Au plating solution deposits a bright white Au alloy which

has a pleasing appearance and is stain and corrosion resistant. Ni and Zn codeposit with the Au to form a coating containing Au 82-90, Ni 8-12, and Zn 2-6%. The plating thickness is 5-50 + 10-6 in., with Au content of 19-21 carats and Knoop hardness of 200-300. A suitable bath comprises KA_u(CN)₂ 1.2, K₂Ni(CN)₄ 10.0, K₂Zn(CN)₄ 0.2, K₂HPO₄ 20.0, and free KCN 3.5 g/l., with KOH to adjust the pH to 10. The bath is operated at 60° and c.d. 70 A/ft². The deposits require no buffing or other mech. operations to further enhance their brightness for use as flatware.

IT 57938-58-6

RL: PRP (Properties)

(electroplating of, cyanide bath for bright)

RN 57938-58-6 HCAPLUS

CN Gold alloy, base, Au 83-90, Ni 8-11, Zn 2-5.9 (9CI) (CA INDEX NAME)

Component	Component Percent	Component Registry Number
Au	83 - 90	7440-57-5
Ni	8 - 11	7440-02-0
Zn	2 - 5.9	7440-66-6

IC C25D

INCL 204040000

CC 72-6 (Electrochemistry)

IT 57938-58-6

RL: PRP (Properties)

(electroplating of, cyanide bath for bright)

L33 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1975:502200 HCAPLUS

DOCUMENT NUMBER: 83:102200

TITLE: Gold alloys
 INVENTOR(S): Kasai, Kazutomo
 PATENT ASSIGNEE(S): Suwa Seikosha Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 50025425	A2	19750318	JP 1973-77736	

1973
0710

PRIORITY APPLN. INFO.: JP 1973-77736 A

1973
0710

AB The Au alloys contain Fe 0.5-9, Cu 3-30, Zn 0.1-20, and optionally Ni and/or Mn 0.1-10%. After age-hardening, Vickers hardness is 212-452. Hardness increases with increasing Fe content. The alloys are suitable for ornaments, fountain pens, and elec. contacts.

IT **57622-25-0**

RL: USES (Uses)
(age hardenable)

RN 57622-25-0 HCAPLUS

CN Gold alloy, base, Au 31-96, Cu 3-30, Zn 0.1-20, Mn 0.1-10, Ni 0.1-10, Fe 0.5-9 (9CI) (CA INDEX NAME)

Component	Component Percent	Component Registry Number
Au	31 - 96	7440-57-5
Cu	3 - 30	7440-50-8
Zn	0.1 - 20	7440-66-6
Mn	0.1 - 10	7439-96-5
Ni	0.1 - 10	7440-02-0
Fe	0.5 - 9	7439-89-6

INCL 10L24

CC 56-2 (Nonferrous Metals and Alloys)
Section cross-reference(s): 76

IT 57622-25-0

RL: USES (Uses)
(age hardenable)

L33 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1974:140580 HCAPLUS

DOCUMENT NUMBER: 80:140580

TITLE: Electroplating of white gold

INVENTOR(S): Greenspan, Lawrence

PATENT ASSIGNEE(S): Engelhard Minerals and Chemicals Corp.

SOURCE: Ger. Offen., 9 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
DE 2342691	A1	19740307	DE 1973-2342691	1973 0823
JP 49065341	A2	19740625	JP 1973-93790	1973 0821
IT 990393	A	19750620	IT 1973-52120	1973 0822
FR 2196908	A1	19740322	FR 1973-30594	1973 0823
AU 7359550	A1	19750227	AU 1973-59550	1973 0823
PRIORITY APPLN. INFO.:			US 1972-283348	A 1972 0824

AB White Au coatings of 381-457 μ thickness on Ag or Ni-plated stainless steel, resistant to staining and corrosion in use as e.g. tablewares, contained 8-11.2% Ni, 2-5.9% Zn, and balance Au and were made by electroplating 2.5-3 min at 4.3-7.5 A/dm² and 60° from a bath of pH 10 containing Au as KAu(CN)₂ 1.2-1.75, Ni as K₂Ni(CN)₄ 8.0-10.0, Zn as K₂Zn(CN)₄ 0.05-0.2, K₂HPO₄ 20.0, and

KCN 3.5-5.0 g/l.
IT **51882-72-5**
RL: PRP (Properties)
(electroplating of, on silver and stainless steel, for
tableware)
RN 51882-72-5 HCAPLUS
CN Gold alloy, base, Au 83-90, Ni 8-11, Zn 2-6 (9CI) (CA INDEX NAME)

Component	Component Percent	Component Registry Number
=====+=====+=====		
Au	83 - 90	7440-57-5
Ni	8 - 11	7440-02-0
Zn	2 - 6	7440-66-6

IC C23B
CC 77-6 (Electrochemistry)
IT **51882-72-5**
RL: PRP (Properties)
(electroplating of, on silver and stainless steel, for
tableware)

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